APPENDIX 1
CLEAN VERSION OF PENDING CLAIMS

1. A host cell for recombinant DNA expression comprising *Flavobacterium heparinum.*

2. The host cell of claim 1 further comprising a vector.

3. The host cell of claim 2 wherein said vector is a plasmid system.

4. The host cell of claim 3 wherein said plasmid system is selected from the group consisting of a modified broad-host plasmid.

5. The host cell of claim 1 wherein said recombinant DNA is integrated into the *Flavobacterium heparinum* chromosome.

6. The host cell of claim 5 wherein said recombinant DNA is integrated through homologous recombination.

7. The host cell of claim 6 wherein a gene encoded by said integrated DNA is expressed at high levels.

8. The host cell of claim 5 wherein said recombinant DNA is integrated through any of bacteriophage integration, transposition of a transposon and transposition of an insertion sequence element.

9. The host cell of claim 1 further comprising a selective marker for selection of host cells expressing a desired recombinant DNA.

10. The host cell of claim 9 wherein said selective marker comprises one or more of a gene encoding antibiotic resistance, heavy metal resistance, a physiological growth inhibitory factor, and an amino acid requirement factor.

11. The host cell of claim 10 wherein said selective marker expression is regulated by a regulatory region from *Flavobacterium heparinum.*

12. The host cell of claim 11 wherein said regulatory region is the heparinase I gene regulatory region.

13. The host cell of claim 1 wherein said recombinant DNA is expressed under the control of a regulatory region from *Flavobacterium heparinum.*

14. The host cell of claim 13 wherein said regulatory region is the heparinase I gene regulatory region.

15. The host cell of claim 1 wherein said recombinant DNA is introduced into said cell by conjugation.

16. The host cell of claim 1 wherein said recombinant DNA is introduced into said cell by electroporation.

17. The host cell of claim 1 wherein said recombinant DNA is introduced into said cell by bacterial phage transfection.

18. The host cell of claim 1 wherein said cell glycosylates glycoproteins encoded by said recombinant DNA.

19. The host cell of claim 1 wherein said cell expresses recombinant DNA containing a homologous gene.

20. The host cell of claim 1 wherein said cell expresses recombinant DNA containing a heterologous gene.

21. A *Flavobacterium heparinum* host organism transformed with recombinant DNA comprising a homologous or a heterologous gene placed under the control of a gene promoter derived from a protein endogenous to the *F. heparinum* host and operably linked to the coding sequence for the homologous or heterologous gene.

22. The *F. heparinum* host organism of claim 21, wherein said gene promoter is *hepA*.

23. A method for producing a desired polypeptide or protein comprising expressing recombinant DNA comprising a coding sequence for the desired polypeptide or protein in a *F. heparinum* host organism.

24. The method of claim 23, wherein the expressed polypeptide or protein is glycosylated.

25. The method of claim 23, wherein the expressed polypeptide or protein is biologically active.

26. An expression system for expressing a desired polypeptide or protein comprising:

(1) a *F. heparinum* host organism

(2) nucleotide sequences encoding a desired polypeptide or protein, and

(3) a vector for expressing the nucleotide sequences capable of expressing the desired polypeptide or protein.

27. A vector which upon introduction into a *F. heparinum* host cell effects expression of DNA encoding a desired polypeptide or protein, the vector comprising (a) a functional origin of replication (*OriC*) region; (b) replication (*rep*) genes; and (c) a gene promoter derived from a protein endogenous to the *F. heparinum* host.

28. The vector depicted in Figure 1.

29. The vector depicted in Figure 2.

30. The host cell of claim 1 comprising a vector comprising (a) a functional origin of replication (*OriC*) region; (b) replication (*rep*) genes; and (c) a gene promoter derived from a protein endogenous to the *F. heparinum* host.

31. The host cell of claim 1 comprising a vector comprising a gene promoter derived from a protein endogenous to the *F. heparinum* host.

32. The host cell of claim 31, wherein said vector further comprises a nucleotide sequence encoding a selectable marker.

33. The host cell of claim 32, wherein said selectable marker encodes for antibiotic resistance.

34. The host cell of claim 33, wherein the host cell is resistant to an antibiotic selected from the group consisting of ampicillin, tetracycline, erythromycin, trimethoprim, and chloramphenicol.